

**WHIP 13 - WETLAND ENHANCEMENT/
CREATION/RESTORATION**

FOTG Practice Codes 657, 658, 659

A. PURPOSE

The purpose of this practice is to provide habitat for waterfowl, wading birds, other aquatic-based wildlife, and neotropical songbirds, while providing water quality benefits to associated wetlands or water bodies.

B. PROGRAM POLICY

Apply this practice to establish permanent wildlife habitat on cropland, idle grassy areas, forestlands, and pasture/hay land consisting of primarily introduced grasses. This practice will consist of hydrology restoration or enhancement. Tree planting shall be restricted to wetness limited, nonhydric soils in capability classes IIw or IIIw.

C. ELIGIBILITY

To be eligible for cost share, this practice shall:

1. Restore or enhance hydrology on prior converted croplands.
2. Create wetland conditions on capability classes IIw or IIIw soils that are non-hydric.
3. Improve wildlife habitat benefits to an acceptable level.
4. Prevent degradation of environmental benefits.
5. Be maintained for the expected lifespan of the practice.
6. Be included in the approved Wildlife Habitat Development Plan.

D. COST-SHARE POLICY

Eligible practice components for this practice shall be determined needed by NRCS and specified in an approved Wildlife Habitat Development Plan (WHDP). This practice shall be cost shared at a rate to meet the minimal needs of the NRCS WHDP.

Eligible Components

Earthmoving for Dike Construction or Tile Breaks
Water Control Structure
Minerals
Eligible Seed
Seedbed Preparation
Seeding
Trees

Shrubs
Mulch
Temporary Cover
Herbicide Application

Temporary cover will be eligible under one of the following conditions: (a) determined needed until required seeds or plant stock are available; (b) needed because normal planting period for the species has passed and erosion problems may occur; (c) needed because of a soil condition such as chemical residue that will not allow establishment of cover immediately.

Seeding costs for herbaceous plant materials is only allowed to establish cover on constructed dikes and spillways.

E. REQUIREMENTS

The following are requirements for this practice:

1. The planted area shall not be harvested or grazed by domestic livestock for the life of the Long-Term Contract.
2. Eligibility shall require that a certified wetland determination be completed prior to approval of the WHIP Long-Term Contract.
3. Prior converted cropland areas may only be managed as moist soil management units. No cropping is allowed. No more than 25 percent of the impoundment area may be planted to an annual grain (e.g., corn, soybeans) for flooding each year.
4. All water control structures shall be closed by October 1 each year, and the project site shall not be drained until after March 1.
5. Trees shall be planted with a mixture of at least three species. Tree species shall be adapted to the site, and when identified as an oak site, shall consist of at least two species of oaks.
6. Impoundment areas may be disked to control woody invasion. Impoundment areas may not be disked more than one year out of four.
7. The following limitations apply to all dike construction planned under WHIP 13:
 - a. Earthmoving cost is not to exceed \$15,000 per contract.
 - b. The maximum pool depth of the impoundment area is three feet below natural ground, with the exception of borrow ditches. Borrow ditches may not constitute more than 5 percent of the impoundment.
 - c. Water Control Structure cost is limited to \$1,500 per structure.

8. A soil test is required for all permanent, herbaceous plantings. Lime and fertilizer are NOT required for trees, shrubs, or temporary cover.
9. If needed, apply mulch as recommended by the Tennessee NRCS electronic FOTG conservation practice standard Code 342.

F. PLANTING TIMESPAN

Planting or sowing after the WHIP Long-Term Contract is approved by the Contracting Officer (Area Conservationist) shall be completed as scheduled in the Wildlife Habitat Development Plan, unless the producer can provide acceptable documentation that seed stock is not available.

G. ENVIRONMENTAL CONCERNS

Consider other resource and environmental concerns (e.g., cultural, wetlands, etc.) as prescribed by the National Environmental Policy Act (NEPA) and other applicable laws and regulations when establishing this practice. A TN-CPA-25 must be completed for each WHDP.

All necessary permits shall be obtained by the participant. Permits needed may include those issued by the U.S. Army Corps of Engineers (USACOE), Tennessee Department of Environment and Conservation (TDEC), and/or the Tennessee Valley Authority (TVA).

H. PRACTICE MAINTENANCE

The practice shall be maintained without additional federal cost share for the expected lifespan of the practice. Cost share shall be refunded if either of the following applies:

1. Participant destroys the cover or structure during its lifespan; or
2. Cover fails to provide the desired wildlife benefits during the life of the WHIP Contract, unless the failure is caused by circumstances beyond the participant's control.

I. TECHNICAL RESPONSIBILITY

NRCS shall have technical responsibility for this practice.

J. SPECIFICATIONS

Approved Cover	Approved plant materials are listed below. Substitutions may be allowed subject to prior approval by the WHIP Program Leader or State Biologist. Permanent perennial vegetation shall be established on all newly constructed dikes.
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Requirements	Temporary cover is only allowed for constructed dikes.
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A soil test is required for all permanent, herbaceous plantings. Lime and fertilizer are NOT required for trees, shrubs, or temporary cover.

If needed, apply mulch as recommended by the NRCS FOTG conservation practice standard code 342.

Permanent Perennial Herbaceous Vegetation for Dikes:

<u>Eligible Seeds or Plants</u>	<u>Seeding Rates (per acre)</u>	<u>Seeding Dates</u>
Switchgrass	10 lbs. (PLS $\frac{1}{2}$)	Apr. 1-July 1
Kobe/Korean Lespedeza	5.0 lbs.	
Switchgrass	15.0 lbs. (PLS $\frac{1}{2}$)	Apr. 1-July 1

Tree/Shrub Establishment:

<u>Species</u>	<u>Spacing</u>	<u>Planting Date</u>
Bald Cypress	12x12 (302/ac.)	Nov. 1-Apr. 1
Green Ash	12x12 (302/ac.)	Nov. 1-Apr. 1
Yellow Poplar	12x12 (302/ac.)	Nov. 1-Apr. 1
Native Sweet Pecan	12x12 (302/ac.)	Nov. 1-Apr. 1
Water Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Willow Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Cherrybark Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Pin Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Swamp Chestnut Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Swamp White Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Sweetgum	12x12 (302/ac.)	Nov. 1-Apr. 1
Nuttall Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Shumard Oak	12x12 (302/ac.)	Nov. 1-Apr. 1
Cranberry Seedlings	Call NRCS biologists for recommendations.	

Temporary Cover - Summer

Millet, Japanese	20 lbs.	May 1-July 1
Millet, Browntop	20.0-40.0 lbs.	May 1-Jul. 1
Millet, Foxtail	20 lbs.	May 1-Jul. 1
Sudangrass	30 lbs.	Apr. 1-Jul. 1

Eligible Seeds
or Plants

Seeding Rates
(per acre)

Seeding Dates

Temporary Cover - Winter

Crimson Clover	20 lbs.	Aug. 1-Oct. 1
Winter Wheat	1.5-2 bushels	Sept. 1-Oct. 20
Cereal Rye	1.5-2 bushels	Sept. 1-Oct. 20
Wheat and Crimson Clover	1 bushel; 10 lbs.	Sept. 1-Oct. 20
Rye and Crimson Clover	1 bushel; 10 lbs.	Sept. 1-Oct. 20

1/ PLS = Pure Live Seed